

## **DECISION MEMORANDUM**

**TO: COMMISSIONER KJELLANDER  
COMMISSIONER REDFORD  
COMMISSIONER SMITH  
COMMISSION SECRETARY  
COMMISSION STAFF**

**FROM: KRISTINE SASSER, DAG  
RICK STERLING**

**DATE: AUGUST 24, 2011**

**SUBJECT: UPDATE TO PUBLISHED AVOIDED COST RATES TO REFLECT AN  
UPDATED NATURAL GAS PRICE FORECAST OF THE NORTHWEST  
POWER AND CONSERVATION COUNCIL, CASE NO. GNR-E-11-04**

Pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA) and the implementing regulations of the Federal Energy Regulatory Commission (FERC), the Idaho Public Utilities Commission (Commission) has approved a Surrogate Avoided Resource (SAR) methodology for calculation of the avoided cost rate paid to PURPA qualifying cogeneration and small power production facilities (QFs) by Idaho Power, Avista and PacifiCorp. Avoided cost rates are the purchase price paid to QFs for purchases of QF capacity and energy.

One of the key input variables in the computation of avoided cost rates is a long-term natural gas price forecast. In accordance with the methodology approved in Order No. 29124, the medium natural gas price forecast of the Northwest Power and Conservation Council (NPCC; Council) is to be used as the basis for computing avoided cost rates. In Order No. 29124, the Commission also found that the release of a new fuel price forecast by the Council or the Council's general advisory committees automatically triggers a recalculation of the published avoided cost rates.

A new Council natural gas price forecast was approved on August 9, 2011. The forecast was posted on the Council's website on August 12, 2011. The forecast amends Appendix A to the Plan. A copy of the amended medium natural gas price forecast is attached. Attachment A. In accordance with the approved methodology, east-side delivered prices are to be used for avoided cost computations.

Commission Staff has recomputed avoided cost rates using the Council's most recent gas price forecast. Staff provided Idaho Power, Avista and PacifiCorp with worksheets on August 16, 2011, for review and comment showing the computation of the revised avoided cost rates. Idaho Power, Avista and PacifiCorp accept Staff's avoided cost calculations as accurately incorporating the Council's August 9, 2011, revised natural gas price forecast and as consistent with the Commission's approved SAR methodology. A copy of the rates for all three utilities is attached.


Staff believes that developers share equal responsibility with Commission Staff and the utilities to be aware of changes in fuel price forecasts and to negotiate accordingly. Regardless of whether new fuel price forecasts cause avoided cost rates to increase or to decrease, Staff believes the Commission should be prompt in approving revised rates. Consequently, Staff recommends that the revised rates become effective on August 30, 2011.

#### **STAFF RECOMMENDATION**

Staff recommends that the attached avoided cost rates for Avista, Idaho Power and PacifiCorp be approved with an effective date of August 30, 2011.

#### **COMMISSION DECISION**

Presented in this case for Commission approval are revised published avoided cost rates incorporating the Council's August 9, 2011, medium natural gas price forecast. The calculation of the fuel cost adjustment to published avoided cost rates is arithmetic. Does the Commission find it reasonable to approve the change in rates effective August 30, 2011?

  
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Kristine A. Sasser  
Deputy Attorney General

M:GNR-E-11-04\_ks\_rs

Bruce A. Measure  
Chair  
Montana

Rhonda Whiting  
Montana

W. Bill Booth  
Idaho

James A. Yost  
Idaho



Joan M. Dukes  
Vice-Chair  
Oregon

Bill Bradbury  
Oregon

Tom Karier  
Washington

Phil Rockefeller  
Washington

August 10<sup>th</sup>, 2011

### **Update to the Council's Forecast of Fuel Prices**

The Council monitors its power planning assumptions on a regular basis to identify any significant changes that might affect its Sixth Power Plan, and the action plan also calls for a biennial monitoring report (MON-1) and a mid-term check on conservation savings (CONS-16).

This report reflects the proposed changes in the Council's long-term fuel price forecast. It is often difficult to distinguish short-term variations in fuel prices, which are expected and modeled in the Council's planning, from significant long-term changes that can fundamentally alter the whole range of future expectations. This rarely happens. However, changes in the outlook for natural gas supplies in the last year appear to signal a fundamental shift in expectations about future natural gas supplies. Cost-effective technologies to obtain natural gas trapped in shale formations has changed the view of natural gas supplies from declining and constrained (as forecast in the Sixth Power Plan) to plentiful and adequate for many decades to come. Although the potential of shale gas was identified in the plan, the expected cost of developing it has been reduced through technological breakthroughs so that future costs and prices are now lower.

After working with the Natural Gas Advisory Committee, the Council is proposing a downward revision of our range of fuel price forecasts. A range of forecasts recognizes continued uncertainty about developing shale gas--its costs and environmental effects--as well as the speed of the economic recovery.

### **Natural Gas Price Forecast Revision**

The range of natural gas prices is significantly narrower and lower in the near term compared to the Sixth Power Plan's forecast. The rapid development of shale gas has created a glut of natural gas that is likely to last for several years and depress prices. By the end of the forecast horizon in 2030, the forecast reflects a range of possible long-term equilibrium natural gas prices. The revised medium forecast is about equal to the medium-low forecast in the Sixth Plan at \$6.44 in 2010 constant dollars. The revised high forecast is a little above the medium-high, and the low revised forecast is a little less than \$1 below the low case.

The range of forecasts reflects the different views of supply and demand for natural gas. The high price forecast might be consistent, for example, with a rapid economic recovery in the U.S. and worldwide, environmental restrictions on shale gas development, aggressive regulation of carbon emissions leading to more substitution of natural gas electricity generation for coal, increased use of natural gas vehicles, increased demand for exports of LNG from Canada and United States, and increased demand from gas-to-liquid projects. In contrast, the low forecast would be consistent

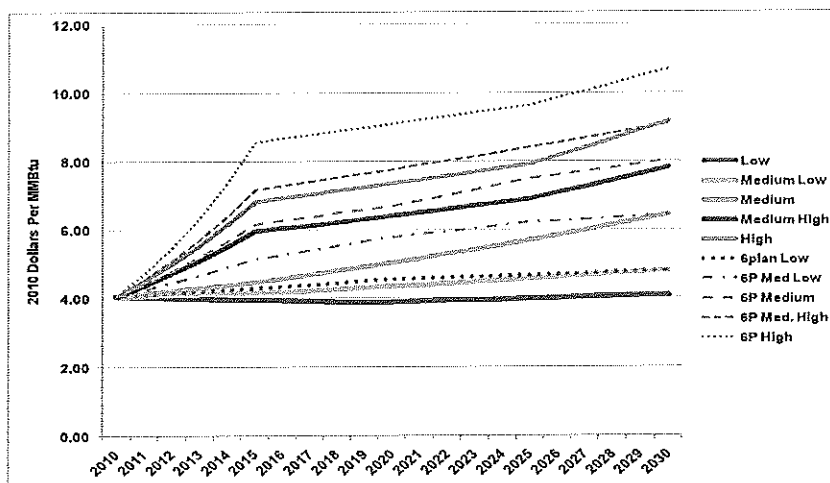
with conditions that limit the demand for natural gas and promote the rapid development of supply.

### Implications of Revised Natural Gas Price Forecasts

The likely effect of the revised fuel price forecast on a revised power plan reduces the forecast of electricity prices, and to some degree, changes the inter-fuel competition between natural gas and electricity. The Council doesn't expect significant effects on the resource strategy from this change, but that will be tested at mid-term. Natural gas generation is already the fall-back resource in the plan, renewables are limited by RPS requirements, and efficiency was constrained by the assumed rates of penetration and development.

The following figures compare the Sixth Power Plan's forecast with the revised forecast. The revised forecast reflects lower natural gas prices.

**Comparison of Revised and Sixth Plan Natural Gas Price Forecasts**  
**Wellhead Price (constant 2010 dollars per mmbtu)**

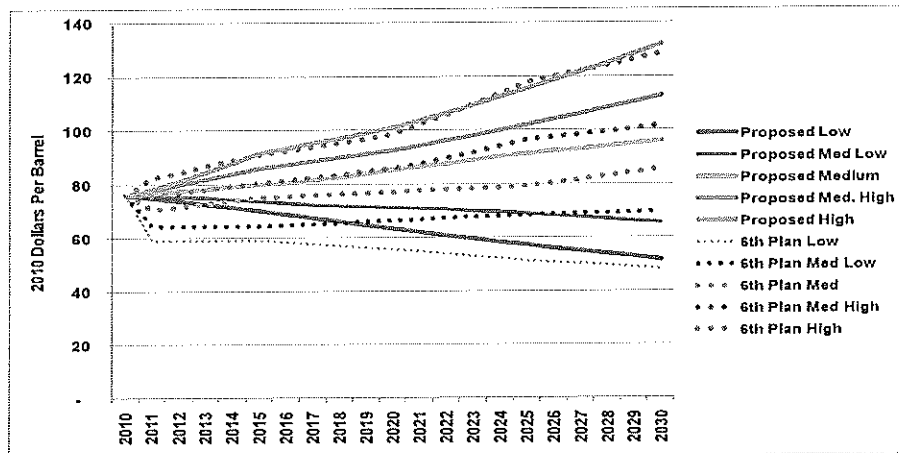


### Oil Price Forecast Revision

The range of world oil price forecasts has not been revised as significantly as natural gas prices. In spite of the changes in natural gas supply and prices, oil prices have remained high, causing a significant disconnection between oil and natural gas prices. Although the Council assumed that natural gas prices would remain below oil prices on a Btu basis, the gap has widened and the proposed revision maintains the wider gap in the future, though reduced somewhat from current levels.

World oil prices have little effect on the Council's power plan because oil has, to a large degree, been relegated to a transportation fuel in the U.S. The primary effect might be on electric vehicle development, but that is largely determined by other factors relating to technology, consumer acceptance, and infrastructure development.

### Comparison of Revised and Sixth Plan Oil Price Forecasts Refiners Acquisition Cost \$2010/barrel

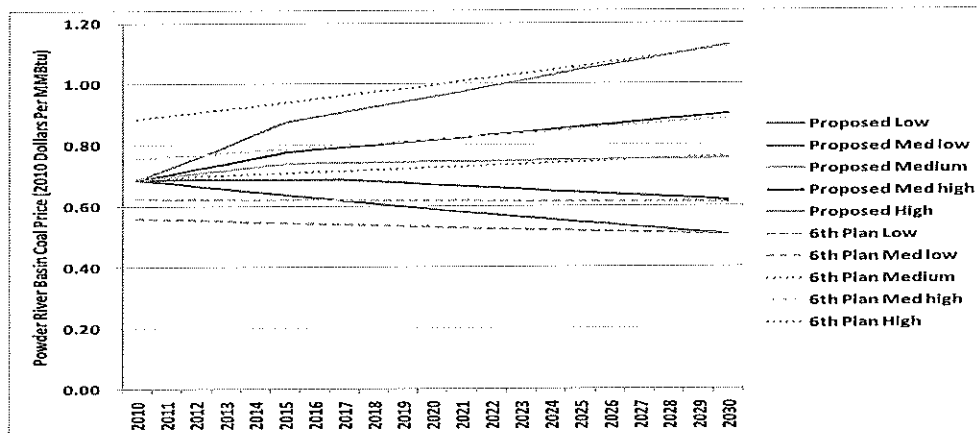


### Coal Price Forecast Revision

Like oil, coal prices have relatively little effect on the Council's power plan. They can affect electricity market prices in relatively few hours and they affect the operating cost of existing coal-fired power plants. However, new coal development is pre-empted in much of the region and new plants do not appear in the Council's plan.

The primary change in the forecast is incorporating 2010 actual prices and narrowing the near-term range. The long-term forecasts for 2030 are unchanged. Unlike the natural gas price forecasts, neither the oil nor the coal price forecasts are used extensively in the region.

### Comparison of Revised and Sixth Plan Coal Price Forecasts Powder River Basin \$2010/mmbtu



## Range of Price Forecast

The following tables present the numeric values for the revised natural gas price forecasts, as well as the refiners' acquisition cost of oil and minemouth coal prices for Powder River Basin coal. The natural gas prices are shown for the wellhead, as well as at various hubs and delivery points. The natural gas prices at wellhead under the medium scenario are shown in constant 2010 dollars, as well as in nominal dollars.

- Table 1: Proposed range of natural gas price forecast -wellhead prices in constant 2010 dollars.  
 Table 2: Natural gas prices delivered at various hubs and Northwest generators- medium forecast  
 Table 3: Wellhead price of natural gas in nominal dollars  
 Table 4: Henry Hub delivered price of natural gas in nominal dollars  
 Table 5: Refiners' cost of acquisition for oil in constant 2010 dollars  
 Table 6: Cost of Powder River Basin Coal in constant 2010 dollars

**Table 1: Proposed Prices for Natural Gas Lower 48  
State Wellhead (2010\$/mmBtu)**

	Low	Medium Low	Medium	Medium High	High
2010	4.05	4.05	4.05	4.05	4.05
2011	4.03	4.07	4.13	4.37	4.50
2012	4.01	4.09	4.21	4.72	4.99
2013	3.99	4.11	4.30	5.10	5.54
2014	3.97	4.13	4.38	5.51	6.15
2015	3.95	4.15	4.47	5.95	6.82
2016	3.93	4.17	4.56	6.04	6.93
2017	3.91	4.21	4.67	6.13	7.03
2018	3.89	4.26	4.79	6.22	7.14
2019	3.87	4.30	4.91	6.32	7.24
2020	3.89	4.34	5.03	6.41	7.35
2021	3.91	4.39	5.16	6.51	7.46
2022	3.93	4.43	5.29	6.60	7.57
2023	3.95	4.47	5.42	6.70	7.69
2024	3.97	4.52	5.56	6.80	7.80
2025	3.99	4.56	5.70	6.91	7.92
2026	4.01	4.61	5.84	7.08	8.16
2027	4.03	4.66	5.98	7.26	8.40
2028	4.05	4.70	6.13	7.44	8.65
2029	4.07	4.75	6.29	7.62	8.91
2030	4.09	4.80	6.44	7.81	9.18

**Table 2: Natural Gas Prices at Key Hubs and Northwest Generators**  
**2010\$/mmBtu**  
**Medium Case**

<b>Year</b>	<b>U.S. Wellhead</b>	<b>Henry Hub</b>	<b>AECO</b>	<b>Sumas Price</b>	<b>West-Side Delivered</b>	<b>East-Side Delivered</b>
2010	4.05	4.25	3.47	3.82	4.40	3.93
2011	4.13	4.34	3.56	3.90	4.54	4.05
2012	4.21	4.43	3.65	3.97	4.63	4.18
2013	4.30	4.51	3.74	4.05	4.71	4.28
2014	4.38	4.60	3.84	4.13	4.79	4.37
2015	4.47	4.70	3.93	4.22	4.88	4.47
2016	4.56	4.79	4.03	4.30	4.97	4.58
2017	4.67	4.91	4.15	4.41	5.08	4.70
2018	4.79	5.03	4.28	4.52	5.19	4.84
2019	4.91	5.16	4.41	4.63	5.31	4.97
2020	5.03	5.29	4.54	4.75	5.43	5.10
2021	5.16	5.42	4.68	4.87	5.55	5.24
2022	5.29	5.56	4.82	4.99	5.68	5.39
2023	5.42	5.69	4.96	5.11	5.81	5.53
2024	5.56	5.84	5.11	5.24	5.94	5.68
2025	5.70	5.98	5.26	5.37	6.07	5.84
2026	5.84	6.13	5.41	5.51	6.21	5.99
2027	5.98	6.29	5.57	5.64	6.35	6.15
2028	6.13	6.44	5.73	5.79	6.50	6.32
2029	6.29	6.60	5.90	5.93	6.65	6.49
2030	6.44	6.77	6.07	6.08	6.80	6.66

**Table 3: Wellhead Price of Natural Gas Nominal Dollars  
Proposed Update August 2011 Values**

	<b>Low</b>	<b>Medium Low</b>	<b>Medium</b>	<b>Medium High</b>	<b>High</b>
2010	4.05	4.05	4.05	4.05	4.05
2011	4.43	4.47	4.54	4.60	4.63
2012	4.48	4.57	4.71	4.85	4.89
2013	4.53	4.67	4.88	5.10	5.18
2014	4.59	4.77	5.07	5.37	5.48
2015	4.64	4.88	5.26	5.65	5.82
2016	4.70	4.99	5.45	5.92	6.19
2017	4.76	5.13	5.69	6.21	6.58
2018	4.81	5.27	5.93	6.50	6.99
2019	4.87	5.41	6.18	6.81	7.43
2020	4.98	5.56	6.44	7.14	7.90
2021	5.09	5.71	6.72	7.48	8.39
2022	5.20	5.86	7.00	7.83	8.92
2023	5.32	6.02	7.30	8.20	9.48
2024	5.44	6.19	7.61	8.60	10.08
2025	5.56	6.36	7.93	9.01	10.71
2026	5.68	6.53	8.27	9.43	11.38
2027	5.81	6.71	8.62	9.88	12.10
2028	5.94	6.89	8.99	10.35	12.86
2029	6.07	7.08	9.37	10.85	13.67
2030	6.20	7.27	9.77	11.37	14.53



**Table 4: Henry Hub Price Forecasts (Nominal Dollars)**  
**Proposed Update August 2011 values**

	<b>Low</b>	<b>Medium Low</b>	<b>Medium</b>	<b>Medium High</b>	<b>High</b>
2010	4.25	4.25	4.25	4.25	4.25
2011	4.65	4.69	4.76	4.83	4.86
2012	4.70	4.80	4.94	5.09	5.14
2013	4.76	4.90	5.13	5.36	5.43
2014	4.82	5.01	5.32	5.64	5.75
2015	4.87	5.12	5.52	5.94	6.11
2016	4.93	5.24	5.73	6.22	6.50
2017	4.99	5.38	5.97	6.52	6.90
2018	5.05	5.53	6.22	6.83	7.34
2019	5.11	5.68	6.49	7.15	7.80
2020	5.23	5.83	6.76	7.49	8.29
2021	5.34	5.99	7.05	7.85	8.81
2022	5.46	6.16	7.35	8.22	9.37
2023	5.58	6.33	7.67	8.62	9.96
2024	5.71	6.50	7.99	9.03	10.58
2025	5.83	6.68	8.33	9.46	11.25
2026	5.96	6.86	8.69	9.91	11.95
2027	6.10	7.05	9.06	10.38	12.71
2028	6.23	7.24	9.44	10.87	13.51
2029	6.37	7.44	9.84	11.39	14.35
2030	6.51	7.64	10.26	11.93	15.26

**Table 5: Refiners' Acquisition Cost of Oil (\$2010/Barrel)**

	<b>Low</b>	<b>Medium Low</b>	<b>Medium</b>	<b>Medium High</b>	<b>High</b>
2010	76	76	76	76	76
2011	75	76	77	78	78
2012	74	75	78	80	81
2013	73	75	78	82	85
2014	72	74	79	84	88
2015	70	74	80	86	92
2016	69	73	81	87	93
2017	67	72	81	88	95
2018	66	72	83	90	97
2019	65	72	84	91	99
2020	63	71	85	93	101
2021	62	71	86	94	104
2022	61	70	88	96	107
2023	60	70	89	98	110
2024	58	70	90	100	112
2025	57	69	91	102	116
2026	56	68	92	104	119
2027	55	68	93	106	122
2028	54	67	94	108	125
2029	53	66	95	111	129
2030	52	66	96	113	132

**Table 6: Powder River Basin Coal Prices \$2010/mmBTU**

	Low	Medium Low	Medium	Medium High	High
2010*	0.69	0.69	0.69	0.69	0.69
2011	0.68	0.69	0.70	0.70	0.72
2012	0.67	0.69	0.71	0.72	0.76
2013	0.66	0.69	0.72	0.74	0.79
2014	0.65	0.69	0.73	0.76	0.83
2015	0.64	0.69	0.74	0.78	0.88
2016	0.63	0.69	0.74	0.78	0.89
2017	0.62	0.69	0.74	0.79	0.91
2018	0.61	0.68	0.74	0.80	0.92
2019	0.60	0.68	0.74	0.81	0.94
2020	0.59	0.67	0.75	0.82	0.96
2021	0.58	0.67	0.75	0.82	0.98
2022	0.57	0.66	0.75	0.83	0.99
2023	0.56	0.65	0.75	0.84	1.01
2024	0.56	0.65	0.75	0.85	1.03
2025	0.55	0.64	0.75	0.86	1.05
2026	0.54	0.64	0.75	0.87	1.06
2027	0.53	0.63	0.75	0.88	1.08
2028	0.52	0.63	0.75	0.88	1.10
2029	0.52	0.62	0.76	0.89	1.11
2030	0.51	0.62	0.76	0.90	1.13

\* Subject to further updates

**AVISTA**  
**AVOIDED COST RATES FOR FUELED PROJECTS**  
**August 30, 2011**  
**\$/MWh**

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	22.26	22.60	22.94	23.28	23.63	23.99	2011	22.26
2	22.42	22.76	23.10	23.45	23.80	24.16	2012	22.60
3	22.58	22.92	23.26	23.61	23.97	24.33	2013	22.94
4	22.73	23.07	23.42	23.77	24.13	24.50	2014	23.28
5	22.88	23.23	23.58	23.93	24.29	24.66	2015	23.63
6	23.03	23.38	23.73	24.09	24.45	24.82	2016	23.99
7	23.18	23.53	23.88	24.24	24.61	24.98	2017	24.35
8	23.32	23.67	24.03	24.39	24.76	25.13	2018	24.71
9	23.46	23.81	24.17	24.53	24.90	25.28	2019	25.09
10	23.59	23.95	24.31	24.67	25.05	25.42	2020	25.46
11	23.72	24.08	24.44	24.81	25.19	25.57	2021	25.85
12	23.85	24.21	24.58	24.95	25.32	25.70	2022	26.24
13	23.98	24.34	24.70	25.08	25.46	25.84	2023	26.63
14	24.10	24.46	24.83	25.20	25.58	25.97	2024	27.04
15	24.22	24.58	24.95	25.33	25.71	26.10	2025	27.45
16	24.33	24.70	25.07	25.45	25.83	26.22	2026	27.86
17	24.44	24.81	25.19	25.56	25.95	26.34	2027	28.28
18	24.55	24.92	25.30	25.68	26.07	26.46	2028	28.71
19	24.66	25.03	25.40	25.79	26.18	26.57	2029	29.14
20	24.76	25.13	25.51	25.89	26.28	26.68	2030	29.58
							2031	30.03
							2032	30.49
							2033	30.95
							2034	31.42
							2035	31.89
							2036	32.38

EFFECTIVE DATE	ADJUSTABLE COMPONENT
8/30/2011	29.33

The total avoided cost rate in each year is the sum of the adjustable component and the fixed component from either of the tables above.

Example 1. A 20-year levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	24.76 + 29.33
2-20	24.76 + Adjustable component in each year

Example 2. A 4-year non-levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	22.26 + 29.33
2	22.60 + Adjustable component in year 2012
3	22.94 + Adjustable component in year 2013
4	23.28 + Adjustable component in year 2014

Note: The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480).

**AVISTA**  
**AVOIDED COST RATES FOR NON-FUELED PROJECTS**  
**August 30, 2011**  
**\$/MWh**

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	51.59	53.47	55.18	56.86	58.67	60.61	2011	51.59
2	52.49	54.29	55.99	57.73	59.60	61.60	2012	53.47
3	53.32	55.08	56.81	58.61	60.54	62.64	2013	55.18
4	54.10	55.87	57.65	59.51	61.52	63.65	2014	56.86
5	54.87	56.67	58.50	60.43	62.49	64.66	2015	58.67
6	55.64	57.48	59.37	61.35	63.44	65.66	2016	60.61
7	56.42	58.30	60.24	62.26	64.40	66.66	2017	62.68
8	57.21	59.13	61.10	63.17	65.35	67.65	2018	64.98
9	57.99	59.95	61.96	64.07	66.30	68.64	2019	67.26
10	58.77	60.77	62.82	64.97	67.24	69.62	2020	69.60
11	59.55	61.58	63.67	65.86	68.17	70.59	2021	72.11
12	60.33	62.39	64.52	66.75	69.09	71.55	2022	74.77
13	61.09	63.19	65.36	67.62	70.01	72.51	2023	77.43
14	61.85	63.99	66.19	68.49	70.91	73.45	2024	80.25
15	62.61	64.77	67.01	69.35	71.80	74.38	2025	83.25
16	63.35	65.55	67.82	70.19	72.69	75.30	2026	86.24
17	64.09	66.32	68.62	71.03	73.56	76.21	2027	89.42
18	64.81	67.08	69.41	71.86	74.42	77.11	2028	92.80
19	65.53	67.82	70.19	72.67	75.27	78.00	2029	96.27
20	66.24	68.56	70.96	73.47	76.11	78.88	2030	99.85
							2031	103.67
							2032	107.63
							2033	111.75
							2034	116.06
							2035	120.56
							2036	125.25

Note: The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480).

**IDAHO POWER COMPANY**  
**AVOIDED COST RATES FOR FUELED PROJECTS**  
**August 30, 2011**  
**\$/MWh**

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	21.99	22.32	22.66	23.00	23.35	23.70	2011	21.99
2	22.15	22.48	22.82	23.17	23.51	23.87	2012	22.32
3	22.31	22.64	22.98	23.33	23.68	24.04	2013	22.66
4	22.46	22.80	23.14	23.49	23.84	24.20	2014	23.00
5	22.61	22.95	23.30	23.65	24.00	24.37	2015	23.35
6	22.76	23.10	23.45	23.80	24.16	24.53	2016	23.70
7	22.90	23.25	23.60	23.95	24.31	24.68	2017	24.06
8	23.04	23.39	23.74	24.10	24.47	24.83	2018	24.42
9	23.18	23.53	23.89	24.25	24.61	24.98	2019	24.79
10	23.32	23.67	24.03	24.39	24.76	25.13	2020	25.16
11	23.45	23.80	24.16	24.53	24.90	25.27	2021	25.54
12	23.58	23.93	24.30	24.66	25.03	25.41	2022	25.93
13	23.71	24.06	24.43	24.79	25.17	25.55	2023	26.32
14	23.83	24.19	24.55	24.92	25.30	25.68	2024	26.71
15	23.95	24.31	24.67	25.05	25.43	25.81	2025	27.12
16	24.06	24.43	24.79	25.17	25.55	25.93	2026	27.53
17	24.18	24.54	24.91	25.29	25.67	26.06	2027	27.94
18	24.29	24.65	25.02	25.40	25.79	26.18	2028	28.37
19	24.39	24.76	25.14	25.51	25.90	26.29	2029	28.80
20	24.50	24.87	25.24	25.62	26.01	26.40	2030	29.23
							2031	29.68
							2032	30.13
							2033	30.58
							2034	31.05
							2035	31.52
							2036	32.00

EFFECTIVE DATE	ADJUSTABLE COMPONENT
8/30/2011	29.33

The total avoided cost rate in each year is the sum of the adjustable component and the fixed component from either of the tables above.

Example 1. A 20-year levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	24.50 + 29.33
2-20	24.50 + Adjustable component in each year

Example 2. A 4-year non-levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	21.99 + 29.33
2	22.32 + Adjustable component in year 2012
3	22.66 + Adjustable component in year 2013
4	23.00 + Adjustable component in year 2014

Note: The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480). These rates also reflect a change in Idaho Power's weighted cost of capital as a result of Order No. 30722 in the Company's 2008 general rate case.

**IDAHO POWER COMPANY**  
**AVOIDED COST RATES FOR NON-FUELED PROJECTS**  
August 30, 2011  
\$/MWh

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	51.32	53.20	54.91	56.58	58.39	60.32	2011	51.32
2	52.22	54.02	55.71	57.45	59.31	61.31	2012	53.20
3	53.05	54.81	56.53	58.33	60.26	62.35	2013	54.91
4	53.83	55.60	57.37	59.23	61.24	63.37	2014	56.58
5	54.60	56.40	58.22	60.16	62.21	64.38	2015	58.39
6	55.38	57.21	59.10	61.08	63.17	65.38	2016	60.32
7	56.16	58.05	59.98	61.99	64.13	66.39	2017	62.39
8	56.96	58.88	60.85	62.91	65.10	67.40	2018	64.68
9	57.75	59.71	61.72	63.83	66.05	68.39	2019	66.96
10	58.54	60.53	62.59	64.74	67.00	69.39	2020	69.30
11	59.33	61.36	63.45	65.64	67.95	70.37	2021	71.80
12	60.12	62.18	64.31	66.54	68.89	71.34	2022	74.46
13	60.90	63.00	65.17	67.43	69.81	72.32	2023	77.11
14	61.68	63.81	66.01	68.32	70.74	73.28	2024	79.93
15	62.45	64.61	66.85	69.19	71.65	74.23	2025	82.92
16	63.21	65.41	67.68	70.06	72.56	75.18	2026	85.91
17	63.96	66.20	68.51	70.92	73.45	76.11	2027	89.09
18	64.71	66.98	69.32	71.77	74.34	77.04	2028	92.46
19	65.45	67.75	70.12	72.61	75.22	77.95	2029	95.93
20	66.18	68.51	70.92	73.44	76.08	78.86	2030	99.50
							2031	103.32
							2032	107.27
							2033	111.39
							2034	115.69
							2035	120.18
							2036	124.87

Note: The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480). These rates also reflect a change in Idaho Power's weighted cost of capital as a result of Order No. 30722 in the Company's 2008 general rate case.

**PACIFICORP**  
**AVOIDED COST RATES FOR FUELED PROJECTS**  
August 30, 2011  
\$/MWh

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

CONTRACT LENGTH (YEARS)	LEVELIZED						NON-LEVELIZED	
	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	21.55	21.88	22.21	22.54	22.88	23.23	2011	21.55
2	21.71	22.04	22.37	22.71	23.05	23.40	2012	21.88
3	21.86	22.19	22.53	22.87	23.21	23.56	2013	22.21
4	22.01	22.35	22.68	23.03	23.37	23.73	2014	22.54
5	22.16	22.50	22.84	23.18	23.53	23.89	2015	22.88
6	22.31	22.64	22.99	23.33	23.69	24.04	2016	23.23
7	22.45	22.79	23.13	23.48	23.84	24.20	2017	23.58
8	22.59	22.93	23.28	23.63	23.99	24.35	2018	23.94
9	22.73	23.07	23.42	23.77	24.13	24.50	2019	24.30
10	22.86	23.21	23.56	23.91	24.27	24.64	2020	24.66
11	22.99	23.34	23.69	24.05	24.41	24.78	2021	25.04
12	23.12	23.47	23.82	24.18	24.55	24.92	2022	25.42
13	23.24	23.60	23.95	24.31	24.68	25.05	2023	25.80
14	23.37	23.72	24.08	24.44	24.81	25.19	2024	26.19
15	23.49	23.84	24.20	24.57	24.94	25.31	2025	26.59
16	23.60	23.96	24.32	24.69	25.06	25.44	2026	26.99
17	23.71	24.07	24.44	24.80	25.18	25.56	2027	27.40
18	23.82	24.18	24.55	24.92	25.30	25.68	2028	27.81
19	23.93	24.29	24.66	25.03	25.41	25.79	2029	28.24
20	24.03	24.40	24.77	25.14	25.52	25.91	2030	28.66
							2031	29.10
							2032	29.54
							2033	29.99
							2034	30.44
							2035	30.91
							2036	31.38

EFFECTIVE DATE

ADJUSTABLE COMPONENT

8/30/2011

29.33

The total avoided cost rate in each year is the sum of the adjustable component and the fixed component from either of the tables above.

Example 1. A 20-year levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	24.03 + 29.33
2-20	24.03 + Adjustable component in each year

Example 2. A 4-year non-levelized contract with a 2011 on-line date would receive the following rates:

Years	Rate
1	21.55 + 29.33
2	21.88 + Adjustable component in year 2012
3	22.21 + Adjustable component in year 2013
4	22.54 + Adjustable component in year 2014

Note: (1) The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480). (2) The rates shown in this table have been computed using the weighted average cost of capital from PacifiCorp's most recent general rate case. (See Order No. 32196).



**PACIFICORP**  
**AVOIDED COST RATES FOR NON-FUELED PROJECTS**  
August 30, 2011  
\$/MWh

Eligibility for these rates is limited to wind and solar projects 100 kW or smaller, and to non-wind and non-solar projects smaller than 10 aMW

LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2011	2012	2013	2014	2015	2016		
1	50.88	52.76	54.46	56.13	57.92	59.85	2011	50.88
2	51.78	53.57	55.26	56.99	58.85	60.84	2012	52.76
3	52.61	54.36	56.08	57.87	59.79	61.88	2013	54.46
4	53.39	55.15	56.92	58.77	60.77	62.89	2014	56.13
5	54.16	55.95	57.77	59.69	61.74	63.90	2015	57.92
6	54.94	56.77	58.65	60.62	62.71	64.91	2016	59.85
7	55.72	57.60	59.52	61.54	63.67	65.92	2017	61.91
8	56.52	58.43	60.40	62.45	64.64	66.93	2018	64.20
9	57.32	59.26	61.27	63.38	65.59	67.93	2019	66.47
10	58.11	60.10	62.15	64.29	66.55	68.93	2020	68.80
11	58.90	60.93	63.01	65.20	67.50	69.92	2021	71.30
12	59.70	61.76	63.88	66.10	68.44	70.90	2022	73.95
13	60.48	62.58	64.74	67.00	69.38	71.88	2023	76.59
14	61.27	63.40	65.59	67.89	70.31	72.85	2024	79.40
15	62.04	64.21	66.44	68.78	71.24	73.81	2025	82.39
16	62.82	65.01	67.28	69.66	72.15	74.77	2026	85.37
17	63.58	65.81	68.12	70.53	73.06	75.71	2027	88.54
18	64.34	66.60	68.94	71.39	73.96	76.65	2028	91.90
19	65.09	67.38	69.76	72.24	74.85	77.58	2029	95.36
20	65.83	68.16	70.57	73.09	75.73	78.50	2030	98.93
							2031	102.74
							2032	106.68
							2033	110.79
							2034	115.09
							2035	119.57
							2036	124.25

Note: (1) The rates shown in this table have been computed using the Northwest Power and Conservation Council's August 9, 2011 Update to the Fuel Price Forecast contained in its Sixth Power Plan approved on February 10, 2010. See Table 2, page 5, East-Side Delivered prices. (Reference Order No. 30480). (2) The rates shown in this table have been computed using the weighted average cost of capital from PacifiCorp's most recent general rate case. (See Order No. 32196).